

STATE OF MAINE
PUBLIC UTILITIES COMMISSION

Docket No. 2003-697

October 2, 2003

PUBLIC UTILITIES COMMISSION
Inquiry into Building Construction Energy
Efficiency Standards

NOTICE OF INQUIRY

WELCH, Chairman; DIAMOND and REISHUS, Commissioners

I. SUMMARY

By way of this Notice, the Maine Public Utilities Commission (Commission) initiates an Inquiry into energy efficiency codes and standards that would govern building construction practices in Maine. We will investigate appropriate standards, applicability of standards, the extent to which standards should be mandatory, and enforcement procedures.

II. BACKGROUND

A. Legislative Directive

During the First Regular Session of the 121st Legislature, the Legislature enacted P.L. 2003 ch. 497, "An Act to Promote Energy Conservation." Section 4 of Chapter 497 states that the Commission "in consultation with the Energy Resources Council, shall form a working group to review current state building energy standards and their enforcement." The law also requires the working group to investigate various advanced building guidelines and the Commission to report its findings to the Joint Standing Committee on Utilities and Energy by February 1, 2004.

In this Inquiry, we will seek comment on current standards and their enforcement. We will state our initial views on various issues to allow commenters to have concrete suggestions to address. However, we have reached no firm conclusions and will rely on information we receive through this Inquiry and through other means to inform our final recommendations. In addition to this Inquiry, we are obtaining information on the advanced building guidelines specified in Chapter 497, and we will consult with the Energy Resources Council and other interested persons after examining the information we have received.

B. Concurrent Building Code Activity

During the First Regular Session, the Joint Standing Committee on Business, Research and Economic Development (BRED) considered bills that would govern other standards and procedures associated with building construction. As a result of the considerations of that committee, a group of persons with interest in the

State's building codes formed the Statewide Building Code Working Group (Statewide BCWG) to consider and recommend a family of codes that would govern a wide range of building operations, including areas as diverse as accessibility, elevators, fire, and plumbing.¹ A family of codes recommended by the Statewide BCWG would include an energy efficiency component. As this Notice is written, the Statewide BCWG has voted to recommend that Maine adopt the International Residential Code (IRC) and the International Building Code (IBC),² which are part of the so-called I-Codes.³ The group is also considering the extent to which codes should be mandatory, and how enforcement might be carried out. The Statewide BCWG will present its recommendations to the BRED Committee during the next legislative session.

C. Current Energy Codes

Maine law, at 10 M.R.S.A. Chapter 214,⁴ contains requirements that govern energy efficiency standards that must be attained during the construction of certain new residential buildings and all new commercial buildings. Chapter 214 establishes prescriptive standards governing new residential building envelope insulation levels but exempts from the requirements new single-family residential buildings that are a person's residence and new log cabins. It requires new construction and renovation of multifamily structures and of commercial or institutional buildings to conform to ASHRAE energy conservation and ventilation standards.⁵

¹ While the Statewide BCWG is attempting to reach consensus, the law authorizing the Commission investigation contains no directive to reach consensus. On the contrary, the law requires that the report contain the Commission's findings and recommendations.

² The Statewide BCWG's recommendation contains qualifications to this general adoption approach. The group will continue to work on its recommendation as the Commission's Inquiry proceeds.

³ The I-Codes are developed by the International Code Council (ICC), an organization that establishes widely-used, comprehensive building standards. I-Codes may be obtained through ICC's web site, www.iccsafe.org. The I-Code standards are differentiated by climate zones, so unique features of Maine's temperature have been considered.

⁴ Chapter 214 and its revision (P.L. 2003 ch. 151, which clarifies references to ASHRAE standards) may be found at <http://janus.state.me.us/legis/ros/meconlaw.htm>.

⁵ ASHRAE is the American Society of Heating, Refrigerating and Air-conditioning Engineers, Inc., an organization that establishes widely-used building standards. The standards referred to in this section of Maine law are ASHRAE 90.1 and ASHRAE 62-2001. The standards may be found at ASHRAE's web site, www.ashrae.org.

D. Current Administration of Energy Codes

Chapter 214 also establishes administration procedures for implementing the statutory energy efficiency standards. It requires the Department of Economic and Community Development (DECD) to administer and enforce the standards and to revise a Manual of Accepted Practices for residential energy efficiency practices (see §1415-E). It also requires the “commissioner” to prepare the Manual, defines the Manual as “prepared by the Department of Economic and Community Development,” and allows the “Director of the Energy Conservation Division” to adopt rules establishing performance-based compliance procedures for residential buildings. The Chapter does not explicitly establish procedures for enforcing compliance with either the residential or the commercial building standards.

Since 1980, the State has maintained a Manual of Accepted Practices. The current version, the “Maine Guide to Energy Efficient Residential Construction – A Manual of Accepted Practices” (the MAP),⁶ was revised by R. J. Karg Associates under the auspices of the DECD. The MAP contains practical descriptions of construction practices that will result in compliance with the residential standards contained in Chapter 214. In addition, the MAP is intended to be a comprehensive guide to residential construction practices, and therefore includes practices that go beyond building envelope insulation levels. These practices are based on commonly accepted approaches that currently are effective in Maine. DECD has distributed the MAP to members of the building community and R.J. Karg Associates will offer training sessions in its application during early 2004.

III. DISCUSSION

A. Appropriate Standards.

Current statutory residential construction standards cover only a portion of the construction decisions that affect the energy efficiency of a building. For example, space conditioning and water heating are not subject to statutory standards. It is reasonable to consider whether more comprehensive standards, such as the efficiency components of the I-Codes, should be adopted. A comprehensive package of state-supported energy efficiency standards may offer more useful guidance to Maine’s architects, engineers, and homebuilders. Broader standards would presumably result in more efficient construction than currently occurs under narrow requirements. The Statewide BCWG’s recommendation to adopt the I-Codes would result in a more comprehensive set of efficiency standards

⁶ The MAP may be found on the Commission’s web page (www.state.me.us/mpuc) by clicking on Legislative Activity.

than is currently in law. We are inclined to favor a comprehensive, rather than a narrow, package of building standards.⁷

This position leads to the question of what comprehensive standards to adopt. We are inclined to agree with the Statewide BCWG's support of the I-Codes. The I-Codes are differentiated into climate zones, including a northern tier that would appropriately represent Maine. However, we believe that the codes should be examined to determine if these standards are appropriate in all cases and, if necessary, a supplement be developed with a relatively few number of Maine-specific amendments to the I-Codes.

In contrast to current statutory single-family residential standards, current commercial and institutional standards (i.e., ASHRAE 90.1 standards) are comprehensive energy standards. Adoption of the I-Codes would also result in adoption of the ASHRAE standards for commercial construction. We are inclined to favor this decision, thus supporting the standards currently in law.

Finally, we believe that adoption of standards that are consistent with those adopted by other states in the region would lower barriers to compliance by those architects and engineers that operate across states. We understand that, although the I-Codes are gaining support in the region, other states' approaches to standards vary, with some New England states requiring little or no efficiency code compliance for some subsets of construction. Thus, we hesitate to base our recommendations on other states' activities.

B. Construction Subject to Standards

Current residential construction standards do not, by statute, apply to construction of single-family residences built by or for the owner to be his/her own residence or to renovation of single-family dwellings. Thus, a significant portion of Maine's residential construction may occur without statutory efficiency requirements. Our initial view on this subject mirrors our view regarding comprehensive standards. Applying standards to all (or a wider subgroup of) residential construction would offer useful guidance to more of Maine's architects, engineers, and homebuilders and would presumably result in more efficient building than occurs under current law. The Statewide BCWG does not appear to limit its recommendation to any specific subgroup of customers. However, we understand that many homebuilders carry out their own renovations, that inadvertent non-compliance by homeowners might result from all-encompassing standards, and that enforcement across all homeowners might be difficult and costly. Some form of graduated standards might be appropriate (e.g., no standards might apply to homeowner renovation but all standards might apply to new construction of all dwellings), although we are

⁷ Whether standards apply to all buildings or only a subset may depend upon whether they are mandatory or voluntary and whether there is adequate State support for enforcement.

unaware whether this approach is practical or widespread. We request further suggestions regarding applicability of standards through this Notice.

Current commercial construction standards apply, by statute, to construction of all commercial and institutional buildings. We are inclined to favor this approach.

C. Voluntary vs. Mandatory Standards

The extent to which standards should be mandatory is contentious and potentially ambiguous in its interpretation. One approach is to adopt a single state standard, but allow each municipality to choose whether to adopt and enforce the standard. This approach would provide construction assistance to architects and engineers, would likely result in adoption by an increasing number of towns or government entities over time, and would establish a baseline of good building practices that allows the resolution of civil disputes regarding unacceptably shoddy building. Alternatively, standards could be mandatory, an approach that ensures that they will be followed consistently but requires that effective enforcement procedures are in place. We have no initial conclusions regarding this issue.

D. Enforcement

Prior to the First Session of the 121st Legislature, DECD was vested with the responsibility for “administration and enforcement” of statutory standards. DECD’s Energy Conservation Division carried out the duties associated with the standards, but limited resources prohibited DECD from implementing meaningful enforcement procedures. Through P.L. 2003 ch. 20, the Energy Conservation Division and its “powers, duties and functions” were transferred to the Public Utilities Commission, but Chapter 214 of Title 10 remained unchanged, thereby apparently leaving DECD with the responsibility for enforcing standards. Regardless of any ambiguity in current law, we must investigate the most effective method for enforcing energy efficiency standards.⁸

There are a variety of increasingly stringent enforcement models currently under discussion within the state. While we do not wish to duplicate discussions conducted by the Statewide BCWG, the law requires that we examine enforcement models in our own study. Enforcement can be done by a state agency (such as the Commission or DECD) or by municipal code enforcement officers. The former method removes local control over local construction procedures; the latter imposes costs on municipalities.⁹ Alternatively, industry self-enforcement can occur if construction contractors are licensed through the Maine’s Bureau of Professional

⁸ If standards are voluntary, enforcement becomes a moot point.

⁹ We understand that a significant percentage of Maine’s municipalities currently do not retain building code enforcement officials; however, the majority of the population live in municipalities that do enforce building standards.

and Financial Regulation, an option that the Bureau is currently investigating. While we hold no opinion regarding the most effective form of enforcement, it is clear to us that a particularly *ineffective* approach is to establish mandatory standards but carry out no enforcement, as occurs now.

IV. QUESTIONS

We ask interested persons to submit written answers to the following questions:

A. Appropriate Standards and Construction to which they Apply

1. Should Maine's current statutory residential energy efficiency standards contained in Title 10, Chapter 214 be expanded to address a comprehensive set of construction procedures? If so, what standards should be added? Should Maine adopt the residential energy efficiency portions of the I-Codes? Are any portions of the I-Codes (as specified for the Northern tier climate zone) inappropriate? Please explain the reasons for your answers, and provide additional suggestions if you wish.

2. Are the practices described in Maine's Manual of Accepted Practices effective and feasible standards for residential construction? If not, what portions of the MAP should change? Is a manual such as the MAP useful to Maine's architects, engineers, and homeowners? Please explain the reasons for your answers, and provide additional suggestions if you wish.

3. Should residential standards apply to all residential new construction and renovation, in contrast to the requirements of Title 10, Chapter 214? If not, what subset of construction should be subject to the standards? Please explain the reasons for your answers, and provide additional suggestions if you wish.

4. Are Maine's current statutory commercial and institutional energy efficiency standards effective and feasible? Should they be retained or amended? If amended, how? Please explain the reasons for your answers, and provide additional suggestions if you wish.

B. Voluntary vs. Mandatory Standards and their Enforcement

5. Should all, or a portion of, residential energy efficiency standards adopted by the State be mandatory? If not, what purpose would the standards serve? Please explain the reasons for your answers, and provide additional suggestions if you wish.

6. If all or a portion of residential energy efficiency standards were mandatory, what method would be most effective and feasible for enforcement?

Please fully describe the method you advocate. Please explain the reasons for your answers, and provide additional suggestions if you wish.

7. Should all, or a portion of, commercial/institutional energy efficiency standards adopted by the State be mandatory, as is currently specified in Title 10, Chapter 214? If not, what purpose would the standards serve? Please explain the reasons for your answers, and provide additional suggestions if you wish.

8. If all or a portion of commercial/institutional energy efficiency standards remain mandatory, what method would be most effective and feasible for enforcement? Please fully describe the method you advocate. Please explain the reasons for your answers, and provide additional suggestions if you wish.

C. Other

9. Please submit any other comments that will help us recommend building energy efficiency standards that will be effective and feasible in Maine.

V. SCHEDULE FOR THIS INVESTIGATION

Please file comments no later than October 24, 2003. Comments should be submitted electronically by going to the Commission's web site (www.state.me.us/mpuc) and following the electronic filing instructions.¹⁰ All comments will appear on the Virtual Case File section of the web site. Filings should refer to Docket No. 2003-697.

Upon review of the comments, the Commission will determine the next steps to take in this Investigation. The Commission will notify all persons who file comments of meetings or other activities that will allow participation in this investigation.

VI. SERVICE OF NOTICE

A copy of this Notice shall be provided to all persons of whom the Commission is aware, who have participated in legislative or regulatory energy efficiency construction activities within the State. The Notice will be posted on the Commission's web page at (www.state.me.us/mpuc and click on Legislative Activity). We encourage persons receiving this Notice to forward it to others who may be interested in commenting.

¹⁰ Persons without electronic access may mail comments to Administrative Director, Maine Public Utilities Commission, 242 State Street, State House Station 18, Augusta, ME 04333.

Dated at Augusta, Maine, this 2nd day of October, 2003.

BY ORDER OF THE COMMISSION

Dennis L. Keschl
Administrative Director

COMMISSIONERS VOTING FOR: Welch
 Diamond
 Reishus

NOTICE OF RIGHTS TO REVIEW OR APPEAL

5 M.R.S.A. § 9061 requires the Public Utilities Commission to give each party to an adjudicatory proceeding written notice of the party's rights to review or appeal of its decision made at the conclusion of the adjudicatory proceeding. The methods of review or appeal of PUC decisions at the conclusion of an adjudicatory proceeding are as follows:

1. Reconsideration of the Commission's Order may be requested under Section 1004 of the Commission's Rules of Practice and Procedure (65-407 C.M.R.110) within 20 days of the date of the Order by filing a petition with the Commission stating the grounds upon which reconsideration is sought.
2. Appeal of a final decision of the Commission may be taken to the Law Court by filing, within **21 days** of the date of the Order, a Notice of Appeal with the Administrative Director of the Commission, pursuant to 35-A M.R.S.A. § 1320(1)-(4) and the Maine Rules of Appellate Procedure.
3. Additional court review of constitutional issues or issues involving the justness or reasonableness of rates may be had by the filing of an appeal with the Law Court, pursuant to 35-A M.R.S.A. § 1320(5).

Note: The attachment of this Notice to a document does not indicate the Commission's view that the particular document may be subject to review or appeal. Similarly, the failure of the Commission to attach a copy of this Notice to a document does not indicate the Commission's view that the document is not subject to review or appeal.